

FCC MAIL ROOM

JAN - 8 1997

RECEIVED

P. O. Box 4607
Greenville, DE 19807

Secretary
Federal Communications Commission
1919 M Street, NW
Washington, DC.

DOCKET FILE COPY ORIGINAL

Dear Sir:

Enclosed are an original and copies of comments for the Sixth Notice Of Proposed Rule Making,
MM Docket No. 87-268, FCC 96-317, that I would like filed. (REPLY COMMENTS)

Sincerely,

William E Mattis Jr

William Mattis, Jr.

No. of Copies 025
List ABCDE

FCC MAIL ROOM

ORIGINAL

JAN - 8 1997

RECEIVED

P.O. Box 4607
Greenville, DE 19807
December 18, 1996

Reply Comments On Sixth Notice Of Proposed Rule Making, MM Docket No. 87-268, FCC 96-317

In earlier notices (Second Notice, August 1992, and Fourth Notice, November 1995), I commented on the effect of ATV on LPTV services. Specifically, I stated that in an area such as mine, a small state (Delaware), adjacent to large metropolitan areas, there will be no local television service of any kind, if all the spectrum is taken by ATV in these metropolitan areas.

As an example, I stated that in Delaware, the only commercial station (channel 12), became an educational station and moved its main studio to Philadelphia. Further, the only other commercial station, channel 61, came on the air a few years ago, and moved its entire operation to Philadelphia. Thus, my station, W55BT, Talleyville (Wilmington) DE, is the only station in the most populous portion of the state (northern New Castle County), and will be eliminated if current proposals are implemented.

Further, in these metropolitan areas, the inner cities themselves, containing a diverse ethnic population, are under served, or not served at all. I have proposed a foreign language operation (W68CV) for Camden, NJ. Again, if ATV proposals are implemented, this project will never come to fruition (the channel will be eliminated).

I believe that LPTV is a legitimate service, was created by the FCC, allowed to grow, and should now not be closed down. Also, when LPTV was granted secondary status, it was not contemplated to eliminate it. Finally, secondary status should not be the same as no status, and that LPTV operators should be allowed to obtain HDTV channels after eligible broadcasters, but before the spectrum is thrown open to the general public.

There should be no deletion of the broadcast band for auction or other purposes. All frequencies channels 2 - 69 should be retained for broadcast purposes. Thus, interference would be minimized, LPTV stations would have more flexibility to relocate, and as always, new growing communities could petition for TV channels. Further, it isn't clear if other uses for these frequencies would ever be economically viable.

With regard to channel allotments, grade B contours, interference, etc., it is noted that until recently, and perhaps even now, the FCC relies on data based upon an early 1980's report on tuner sensitivity, this tuner data being collected in the 1970's. If this is still the case, then the allotment procedures you have described previously for these proceedings are seriously

flawed, given the better tuners in today's TV sets made for adjacent channel cable TV broadcasting (Another comment concerning this issue appears later).

LPTV broadcasters should be allowed first choice after DTV full power channels have been assigned, given their ranking in history, this service having first been proposed in the late 1970's; the first station going on the air in the early 1980's.

With regard to the treatment of vacant NTSC noncommercial channels, since the FCC has proposed to eliminate the vacant commercial channels to free up spectrum space for these proposals, vacant noncommercial channels should be treated in the same manner. This would then allow spectrum for LPTV stations that have been serving their communities. Clearly, they should rank higher in preference to channels that have never even been applied for at all.

I support the suggestion in paragraph 67 regarding 'displacement relief' for LPTV stations.

With regard to paragraph 68, new service providers, if allowed to take over existing LPTV operators, should be required to compensate existing LPTV licensees for their investment. There is precedence to this in existing communications law, given other situations where certain services had to vacate their band, and more elsewhere, to 'make way' for a new service.

The Commission should allow any LPTV station that is forced to cease operation, after being 'bumped', to resume operation on one of the many channels of a new DTV operation.

The Commission should, regardless of the outcome of this proceeding, mandate cable carriage for LPTV stations. Again, as stated above, the first station went on the air in the early 1980's. Thus, this service has a 16 year history. These stations are serving their communities with programming that is otherwise lacking. They should not be penalized in any way with regard to their full power 'counterparts', just because they cannot operate at maximum power for their channel. In fact, many so-called full power stations are not operating at their maximum power, some UHF stations are operating at 12KW etc., but they get cable coverage. Why should not LPTV stations then, have the same rights?

In paragraph 70, I support the idea of setting aside a few channels for displaced LPTV stations. The more the better.

In paragraph 71, is mentioned the use of terrain shielding, among others, to protect LPTV stations. This, and any other methods, should be used to protect these stations. Again, as mentioned previously, the receiver tuner issue should be given high consideration before designating 'taboo' channels. Tuners are, and can be built, with good filtering and rejection properties.

With regard to paragraph 77, channel 20, for land mobile use in Philadelphia, should be eliminated. There is only room now, in the City of Philadelphia proper, for one UHF LPTV station, the nation's fourth market. This was in fact stated, in an earlier proceeding. . Land mobile stations can easily be accommodated without using TV frequencies anymore by making use of new technologies.

Addressing again the methodology with regard to channel assignments, tuner receiver data that impacts channel assignments is referenced to a 1988 report on page 34 of this proceeding. As stated previously, this data is old, given new technology, and thus this assignment pattern is flawed. Further, on page 37, you reference optimizing these assignments to a journal article on 'simulated annealing'. This work, originated, in a large part, from neural network modeling. Having written a number of papers in this area, neural network theory is nonlinear system theory. As such, one global minimum cannot easily be identified, and may not be reached, because there are a number of local minima. Thus, when you run your computer program to allocate channels using this theory, you are not guaranteed that you are getting the optimal channel assignment pattern.

Finally, with regard to technical matters, you should investigate the reuse of frequencies, that satellite systems now employ. Specifically, channel capacity there is greatly increased by having some users operate, on the same frequency, with horizontal polarization, and others with vertical polarization.

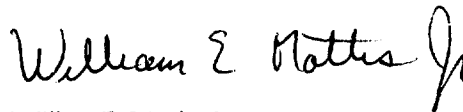
I reject the idea of using industry frequency coordinators to adjudicate frequency proposals. To date, the ones that exist now in major markets are tied to vested interests and thus, would not be favorable to LPTV or other proposals. Thus, I suggest that the FCC adopt standards, and process any proposals.

I support the Community Broadcasters Association ideas as listed below:

- a) Provide for a more flexible use of offset to decrease the distance separations necessary to prevent interference.
- b) Relax the interference protection standards to reflect current technology, including the adjacent channel, oscillator, aural image, and intermodulation taboos.

- c) Eliminate the restrictions for LPTV on transmitter output power and use effective radiated power to predict interference instead, as is already the case for full power stations.
- d) Allow LPTV stations to co-locate with DTV stations and permit LPTV stations to locate within a DTV station's contour as long as no interference is caused to the DTV station.

Sincerely,

A handwritten signature in cursive script that reads "William E Mattis Jr". The signature is written in dark ink and is positioned above the printed name.

William E. Mattis, Jr.